

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A plane carbon commutator comprising:

a plurality of metal segments fixed to a commutator body made of resin, said metal segments having engaging holes and cut-rising pieces forming tip ends projecting inwardly from peripheral edges of said engaging holes; and

a carbon previously burnt at a high temperature, said carbon having engaging projections being engaged with said engaging holes provided in said metal segments and integrally formed as one unit, each engaging projection having an end and a peripheral side,

wherein the tip ends of said cut-rising pieces extend inwardly from the peripheral edges of the holes to engage the peripheral sides of the engaging projections with pressure sufficient to form coarse faces on the peripheral sides as the projections are inserted into the holes, and to prevent said engaging projections from being pulled out from said engaging holes, so that it is unnecessary to form coarse faces on the peripheral sides of said engaging projections before inserting the projections into said engaging holes.

2. (Cancelled)

3. (Original) A plane carbon commutator according to Claim 1, wherein conductive paste is interposed between said segments and said carbon.

4. (Cancelled)

5. (Previously presented) A plane carbon commutator comprising:

a plurality of metal segments fixed to a commutator body made of resin, said metal segments having engaging holes and cut-rising pieces rising from peripheral edges of said engaging holes;

and

a carbon previously burnt at a high temperature, said carbon having engaging projections being engaged with said engaging holes provided in said metal segments and integrally formed as one unit, said each engaging projection having a tip end and a peripheral side,

wherein tip ends of said cut-rising pieces are operative to allow insertion of said engaging projections into said engaging holes, but operative to prevent said engaging projections from being pulled out from said engaging holes, and

the tip ends of said cut-rising pieces are dimensioned to have a smaller diameter than the diameter of each engaging projection whereby said cut-rising pieces are brought into contact under pressure with said peripheral sides of said engaging projections, so that said cut-rising pieces form coarse faces on the peripheral faces of the tip end side of said engaging projections as said engaging projections pass through said engaging holes.